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fluid having a carbon component.

2. (amended) A green-compact electrode for electrical discharge surface treatment according to claim 1, wherein the working fluid constitutes 5 wt % to 10 wt % of the green compact electrode.

3. (amended) A method of manufacturing a green-compact electrode for electrical discharge surface treatment comprising: the step of compression-molding a mixed material of a metal powder and a working fluid having a carbon component.

4. (amended) A method of manufacturing a green-compact electrode for electrical discharge surface treatment according to claim 3, wherein a mixture ratio of the working fluid constitutes 5 wt % to 10 wt % of the green compact electrode.

5. (amended) A method of performing electrical discharge surface treatment comprising:

positioning a green-compact electrode comprised of a mixed material of a metal powder and a working fluid having a carbon component opposite a work in a second working fluid, which is the same as the working fluid within the green-compact electrode; and

forming a hard coating film on the work by causing electrical discharge between the green compact electrode and the work.

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- 6. (amended) An apparatus for performing electrical discharge surface treatment comprising: a green-compact electrode comprised of metal powder and a working fluid having a carbon component; a work; a working tank for receiving said work; and means for causing an electrical discharge between said green compact electrode and said work.
- 7. (amended) A method of recycling a green-compact electrode for electrical discharge surface treatment comprising:
- a) compression molding a mixed material of a metal powder and a working fluid having a carbon component to form the green-compact electrode;
 - b) positioning the green-compact electrode opposite a work;
- c) performing discharge surface treatment by causing electrical discharge between the green-compact electrode and the work to form a hard coating on the work;
- d) pulverizing portions of the green-compact electrode which are left after said discharge surface treating has been completed into powder, and
- e) compression molding the powder obtained from the pulverizing step to obtain a new green-compact electrode.

Please add the following new claim:

8. (new) A method of recycling electrodes used in electrical discharge surface dreatment, comprising:

collecting used electrodes which are primarily composed of compressed powders;

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Meld

pulverizing said used electrodes into a powder; and compression molding said powder to form new electrodes.